

FUN WITH ENERGETICS

VOL1



BY KÄPTN K
FIRST EDITION

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ONLY

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READ BY PEOPLE WHO
WANT TO BLOW UP
PEOPLE, ANIMALS, OR
PRIVATE PROPERTY

CONSULT LOCAL LAWS
:-)

PREFACE

Now-a-days, fireworks are lame and boring. After years upon years of dumbass kids blowing their fingers off with M-80s and Quarter Sticks, the general consumer's fireworks have been dumbed down to no-more than .5 grams of low explosive. LAME! In some communist states like Massachusetts you can't buy any sort of firework. LAME! But do not fret. For any aspiring demomaniac, producing their own exciting devices with just a little bit of time and elbow grease. This text is intended to teach total beginners how to produce some simple and interesting compounds for their own amusement.

SAFETY

Many of these recipes are very dangerous, as is the nature of energetic materials. This shouldn't dissuade you from experimenting with them, but you should use extreme caution. Here are some rules that should generally be followed when dealing with this stuff.

1. Store your explosives in a cool, dark, safe place away from lights or space heaters or small children.
2. Use your explosives as soon as you can after making them.
Many of the recipes listed here will degrade pretty quickly, and become very unstable or simply won't work.
3. If something you made fails to go off, wait at least 15 minutes before approaching it. If you are certain it won't go off, it probably will anyway ;)

LEGAL SAFETY

Unfortunately, authorities will try and do anything they can to stop American citizens from having fun. Gestapo police officers and HOA authoritarians will bring down the book if they catch you playing with stuff like this. Here are some tips to help you with this.

1. Wipe off fingerprints from any device you intend to use
2. Never share recordings of your devices publicly
3. Don't talk about your explosives publicly
4. Avoid unencrypted apps when talking about explosives online
5. Be mindful when purchasing certain materials as to not draw attention to yourself
6. Know the legitimate uses for everything you buy incase you are questioned
7. Don't be a terrorist

Be safe, and have fun

1. Fireworks

Fireworks are lame, but they are also a cheap source of bulk energetic material. You can buy fireworks by the box online or in a store for cheap. This is a good place to start in my opinion. Black powder and flash powder are two common fillers in fireworks and firecrackers. These two have very low detonation velocities, with flash powder having a slightly higher detonation velocity.

Another use for fireworks and firecrackers is as detonators for secondary explosives.

2. Black Powder/Gun Powder/Smokeless Powder

These three materials are very similar to each other. They can be purchased cheap (about \$20 per pound) and they all deflagrate instead of truly “exploding”. This means that they burn very quickly, but not faster than the speed of sound. Smokeless powder burns the slowest, so I’d avoid purchasing it.

Making your own black powder

Black powder is quite simple to make. You’ll need three ingredients:

- Charcoal
- Potassium Nitrate
- Sulfur

Don’t use charcoal briquettes, like the sort you use in a grill. These contain clay and are totally useless for black powder. If you can’t find pure charcoal, you can make it very easily at home. Potassium Nitrate is sold as stump remover and can be purchased in Walmart or any garden or hardware store. Personally, I like Spectracide. Sulfur can be bought from the same place. It’ll come in

pellets or clay beads. I'd avoid the clay beads, as you'll have to wash the clay out before using the powder.

First, you'll have to refine your materials. For the charcoal, crush up the charcoal chunks as well as you can (I like to use a mortar and pestle) and then put it through an electric coffee grinder. For the Potassium Nitrate, simply clean out the coffee grinder and powderize the stump remover. Then, clean it out and do it again for the Sulfur. Once your done, store them in separate sealable containers until the next step.

After you are done refining, you'll have to mix your materials. The secret ratio for this is 75% Potassium Nitrate, 15% Charcoal and 10% Sulfur. You can use a scale to measure out the ratio, but if you don't have one you can use this little trick. All you'll need is some kind of open container like a glass, and a ruler. Determine how deep the container is using the ruler, then figure out 75%, 15% and 10% of that. Use the ruler to pour out those amounts into the container, and then mix them together.

Next you'll have to mill the materials. This is the hard part. You'll need a ball mill or a rock tumbler. You could potentially use the coffee grinder if you don't particularly value your life. Hand mixing the solution will result in black powder which does not burn as fast as it should. LAME! If you're using a rock tumbler or ball mill make sure to use lead balls, not steel balls. Steel balls will smash together and make sparks which will make your black powder blow up before you ever get to have fun with it. I mix for 24 hours, and I like to shake it every so often to avoid it from clumping. If your materials do clump, it means that they have taken on some moisture. The only way to stop this is by drying your ingredients in an oven before mixing and milling. Now you're done! Enjoy your black powder.

“The Joint”

One simple design you may like to try consists only of a newspaper and black powder. (gun powder will work too, of course, but for brevity I will only be mentioning black powder henceforth) Simply lay a newspaper flat and pour in as much black powder as you like. Then, wrap it into a tube and crimp it on both ends (sort of like a joint :-)). If you like you can tape off the ends, but this isn't necessary. When ready to use it, simply light one of the crimped ends! In my personal experience I've found that this method can be somewhat unreliable, so if you'd like you can add a length of cannon fuse at one of the ends. I'll get into cannon fuse later.

Black powder can be used in pipe bombs to increased effect, but that is for a separate chapter.

3. FUN WITH MATCH HEADS

If you can't get black powder, a fun substitute is match heads. They don't burn nearly as quickly but can be bought in bulk very cheap. Use a knife to carefully shimmy the material (often Potassium Chlorate mixed with a binding agent for those who may be interested) and use it as you would use black powder. Cutting enough match heads can be tedious work for one but an evening's fun for the family if you can drag them away from the TV :-)

4. Napalm

Napalm isn't really an energetic material, but it's fun and I'm sure the reader would like to know about it. It's really easy. First, fill up a bathtub with as hot water as you can get it. Then fill up some other container with gasoline and put it in the bathtub. Wait for the gasoline

to heat up, and then add as much powdered soap or soap shavings as the gasoline will eat. Solid detergent won't do, make sure its soap. This makes a very potent filling for incendiary devices.

5. Expedient Napalm

Here's a quicker and easier recipe for napalm that doesn't require heat or soap. Simply dissolve styrofoam into gasoline until it stops dissolving!

6. Making Fuse

Cannon fuse is an essential asset to any amateur demolitionist, and it can be readily purchased online or at firework stands. But of course, you may want to learn how to make it yourself. Simply mix one part Potassium Nitrate and two parts epoxy glue together. Then dip cotton string into the mixture and let it soak all the way in. Let it dry for 30 minutes.

7. Molotov Cocktail

A classic incendiary device from the Finnish Winter War. You'll need a flammable liquid, a glass bottle, and a rag. I would recommend one of my earlier napalm mixtures as just using gasoline results in very disappointing results. Personally I like wine bottles the most, but really any will do. Except for glass coke bottles, they are very hard to break. Simply pour the flammable fluid into the glass bottle, douse the rag in gasoline, and jam it into the bottle. When using this method only throw underhand, do not throw over your shoulder. A more expensive, but safer and more reliable method of ignition is a road flare. Just tape a road flare to the side of the bottle, and when you're ready strike the flare and throw it. This way you can throw it over your shoulder and eliminate the risk of the rag drying up and becoming inflammable.

8. DIY DETONATORS

One of the explosives listed later in this text will require a detonator to get it going, so here are two recipes for such.

C02 “Cricket” Detonator

For this design you'll need an empty c02 cartridge (the little metal variety), some cannon fuse and an explosive filling of your choice. First, fill up the empty c02 cartridge with the explosive filling (TATP, black powder, flash powder, the sort). Then, carefully insert the fuse into the opening! If the fitting on the fuse is too loose, wrap some thin tissue paper around the fuse before inserting it. If you use TATP, add a little bit of black powder after the TATP to help it ignite. These aren't just good detonators, but fun fire crackers too!

Glass Vial Detonator

The steps for this are the same, but instead of using a c02 cartridge you will use a glass test tube or vial. This yields a more powerful detonator that can reliably set off Ammonium Nitrate based binary explosives. (which are covered later in this book)

9. I CANT “BLEVE” IT!

BLEVE - or Boiling Liquid Expanding Vapor Explosion. Practically any can of compressed flammable gas can be coaxed into blowing up. Hairspray and WD-40 are my personal favorites. The simplest way of doing this is by tossing one of these cans into an open fire and waiting. Within 40 seconds or less you should get a spectacular orange fireball! You can also tape a large enough fire cracker to make a miniature Fuel-Air Bomb. Tons of fun. A larger version of this will be discussed later in this book.

10. PIPEBOMBS!

Pipe Bombs have been an American national pastime for as long as we can remember. Fun Fact: When K  ptn K's grandfather (Gr  ndd  ddy K) was just 11 years old he built a series of pipe bomb mines with trip wires to deter Jap invaders in 1941. He and his good buddy built and buried three of them on the beach until an Orange County Sheriff caught them and with balls of steel disarmed all three. His mother never found out. I guess it runs in the family!

Pipe bombs are very versatile devices. Their construction is very straightforward. All you need is a fuse, a length of galvanized steel pipe, two matching end caps, and explosive filler. Don't use PVC or Copper pipes.

First, drill a small hole in one of the end caps, large enough to snugly fit the fuse. Don't drill the hole while the end cap is attached to the pipe, and especially if the pipe is full.

Then, fill the pipe up with your filler of choice. If you use something sensitive like black powder or TATP (you maniac!), I'd recommend putting the filling in a plastic bag before placing it in the pipe to avoid any sort of mishap when you screw the second end cap on. If you use a secondary explosive (like one of the binary ones described in this volume) then you'll need a detonator.

Route a fuse (and optionally a detonator) through the hole in the end cap. You may want to wrap the end of the fuse that's in the pipe with tissue paper to help it detonate the filling. Finally carefully screw the end cap onto the pipe. Enjoy!

11. MILK JUG FIREBOMB

You may have seen videos of these online. This recipe consists of a milk jug, gasoline, and a large firework. Empty out a milk jug, fill that bitch up with gasoline, and tape a large firework to the side. This will make a huge fireball and spread flaming gasoline around a small radius. Don't use indoors or near dry vegetation. More jugs of gasoline can be tape around the firework in a circular fashion for a larger fireball. The firework can be substituted for practically any other recipe here. A Joint, a pipe bomb, a detonator. You could fill a toilet paper tube with black powder. Your options are only limited by your creativity.

12. AMMONIUM NITRATE BINARY EXPLOSIVES

Here's our first high explosive. Ammonium Nitrate! More specifically, binary Ammonium Nitrate based explosives. These are clean, legal (in most states), high-explosive fun. Ammonium Nitrate is very easy to get. You can purchase it by the pound online or in many sporting goods stores under the brand names "Tannerite" "Sure Shot" "Sonic Boom" and dozens of other brands. Simply, these are bags of Ammonium Nitrate and some sort of other material, often Aluminium powder. Mixed together and shot, this produces a nice boom with a large cloud of noxious orange smoke. Fun, but we can do better.

Another far more complex method of obtaining it is through fertilizer. Ideally, look for 32-0-0 fertilizer. Those numbers are the NPK code, which indicate the Nitrogen, Phosphorus and Potassium in the fertilizer. 32-0-0 will save you a lot of trouble but is damn hard to get. Make sure to carefully read the ingredients on the bag before purchasing. Avoid anything that has Urea on the label. If you can't find 32-0-0, try for 15-0-0.

Now to extract the ammonium nitrate from the fertilizer, first crush the fertilizer granules using a rolling pin or any other suitable tool. This will expose the ammonium nitrate inside the granule and allow easy extraction. Next place the crushed fertilizer in a plastic pail or glass container. Never use metal containers. In particular, contact with copper must be avoided because a reaction will occur forming a copper azide which is dangerously unstable.

Then for each pound of ground fertilizer in the container, add a pint of hot water. Boiling hot water fresh off the stove would be best. Stir the mixture for about 5 or 10 minutes. The ammonium nitrate will all dissolve into the hot water, and leave a lot of inert ingredients behind, undissolved in the pail.

Once the water has cooled down a bit, the mixture should be filtered. A doubled up coffee filter works pretty well at removing the undissolved fertilizer sludge. For larger runs, a pillow case should work almost as well. The filtered water should look clear. If there is suspended gunk floating around, filter it again.

The amount of liquid which filters out of the fertilizer will be less than one pint per pound of fertilizer. To recover the ammonium nitrate left trapped in the fertilizer sludge, add about one-half pint of water to the sludge for each pound of fertilizer originally used. Stir it around for a couple minutes, then filter again.

Now the amount of water filtrate should be at least one pint for each pound of fertilizer originally used. The fertilizer sludge can be thrown away, because now all the ammonium nitrate is in the water filtrate.

If 15-0-0 fertilizer was used, and if all the nitrogen came from ammonium nitrate, and if all the active ingredient was extracted from the fertilizer, each pint of filtrate would contain about 200 grams of ammonium nitrate. In the real world, extraction will be less than 100% efficient. Also, urea and ammonium sulfate will extract right along with the ammonium nitrate. Now one must go about isolating fairly pure ammonium nitrate from the extract.

Ammonium nitrate dissolves amazingly well in water. It dissolves so well that on a humid day it will suck water out of the air and dissolve itself, forming a wet puddle. It doesn't dissolve very well in ethyl alcohol, the "denatured alcohol" found in the paint section of the hardware store. Urea, on the other hand, dissolves well in both water and alcohol. This will form the basis of our isolation procedure.

To begin isolation of ammonium nitrate, put the filtrate into a teflon coated pan or kettle, depending upon how much liquid one is dealing with. Now boil away the water until the liquid is reduced to about 1/4 of its original volume, or until white crystals of ammonium nitrate form in the boiling liquid, whichever comes first.

Next, remove the pan or kettle from the heat, and let it cool down. When the liquid starts to reach room temperature, add two volumes of denatured alcohol for each volume of liquid in the pan. The alcohol should be added fairly slowly with strong stirring of the mixture during the addition of alcohol. Cold alcohol only dissolves 4 grams of ammonium nitrate per 100 ml of solution. By changing the solution to predominantly alcohol, most of the ammonium nitrate is thrown out of solution as white crystals. Chill the mixture down in the refrigerator to complete the crystallization of the ammonium nitrate product.

Once the mixture is cold, filter out the crystals of ammonium nitrate using doubled up coffee filters or a pillow case, depending upon how large the batch is. Squeeze the liquid out of the crystal mass, then put the crystal mass onto a plate. Spread it out to air dry. Obviously, this can't be done on a humid day.

When the crystals have air dried, put the plate into a microwave and heat it for about 5 minutes, or until the crystals are very dry and crunchy. Then finally put the product into a blender and grind the crystals while shaking the blender to get a nice and fine crystal size.

The crystals should now be poured into a plastic ice cream container or other plastic container with a lid which will seal against moisture from the air. This is important because of the ease with which ammonium nitrate absorbs water from the air.

The product obtained by this extraction will be pretty pure ammonium nitrate, contaminated to some extent with urea and ammonium sulfate. A little bit of urea doesn't hurt. In fact, some very powerful ammonium nitrate explosives purposely contain urea. See for example US Patent 3,546,035 and US Patent 3,546,034. The ammonium sulfate will probably not interfere much with the explosive properties of the mixture, so long as it isn't present to a large extent.

AMMONIUM NITRATE FROM NITRIC ACID AND AMMONIA

Adapted from *Home Workshop Explosive, Uncle Fester*

The method of extracting ammonium nitrate from fertilizer is a fair amount of work, and gives an impure product when ammonium sulfate is present in the fertilizer. Fertilizer formulations may also be further messed with in the future in attempts to frustrate fertilizer extractions. This could happen very easily, as I've seen the same things happen in

other areas in which I write. As a safeguard against that, and as a way to more easily make large amounts of ammonium nitrate, I will give to you Plan B, the direct synthesis of Ammonium Nitrate from two very cheap industrial chemicals. The low cost and ease of this procedure is the reason why ammonium nitrate became popular as a blasting agent, and as a diluent for military explosives.

Roughly equal volumes of concentrated nitric acid (70%) and strong ammonia (30% NH_3 , 56% NH_4OH) will react together to make a solution of Ammonium Nitrate in water. You already know that the other 30% in 70% nitric acid is water. The same is true with the strong ammonia. It is 70% water. After reaction, all that is required is to boil off the water. This is a nasty, violent, fume filled reaction, so I would make fertilizer extraction my first choice. To do this reaction, especially on a larger scale, you need good ventilation to keep yourself upwind from the fumes. You also need protective eyewear, and maybe an apron.

To do the reaction, take a glass or plastic container, and fill it no more than one-third full with nitric acid. Now procure a roughly equal volume of strong ammonia solution. Ace Hardware store sells an industrial strength strong ammonia solution as a janitorial supply. It contains no soap or other contaminants. Ask to see the MSDS to make sure you have the right product. Getting industrial ammonium hydroxide, aka NH_4OH in a drum, would be best. This is some fuming stuff! Stay upwind, and wear eye protection!

This reaction is much too violent to just add the ammonia to the nitric acid. Some dilution to calm things down a bit is called for. Remove 25% of the ammonia solution which is destined to react with the nitric acid, and dilute it 50% with water. After good stirring to mix the water in, this ammonia solution can slowly with good stirring be

added to the nitric acid. They react together violently, and produce a bunch of white fumes. This cloud of fog is nitric acid fumes reacting with ammonia fumes to make a bunch of small particles of ammonium nitrate in the air. Stay upwind of it! When the slow addition of the first 25% of the ammonia solution is complete, let the mixture cool back down. It is very easy to cause the whole mixture to come to a boil.

When the mixture has cooled back to near room temperature, measure out the next 25% of the ammonium hydroxide solution, and slowly begin to add this to the reaction mixture without first diluting the ammonia. The same violent reaction occurs, along with the cloud of white fog. The mixture will again heat up, and good stirring during the addition of the ammonia is required. Let the mixture cool down after this addition of ammonia.

When the mixture has cooled down once again, take the final 50% of the ammonia solution, and again slowly with stirring add it to the reaction mixture. The same white fog will be generated, along with lots of heat. When enough ammonia solution has been added to react with all the nitric acid, the smell of the solution should be fairly weak like ammonia. A little bit extra ammonia won't hurt, but too little ammonia added will give a bad product.

Now we are ready for the boil down of the product. Put the reaction mixture into a teflon coated pan or kettle, and begin to boil away the water. Boil it down until crystals of ammonium nitrate begin to appear in the solution. Ammonium nitrate loves to climb the walls of whatever container you put it in and crystallize there. That's not what I'm talking about. I mean crystals floating around in the boiling mass of liquid.

When this point has been reached, stop heating the mixture. Let it cool down to room temperature. The whole mass of solution will just be set up as an ammonium nitrate cake. As it is setting up, one would be well advised to add one volume of denatured alcohol to the mixture, and continue the cooling in the refrigerator. Strong stirring during the addition of the alcohol!

Now that the mixture is nice and cold, filter the crystal mass. As in the fertilizer extraction, squeeze out the liquid from the filtered crystal mass, and put it on a dish for air drying. Once air dried, microwave the mass until dry and crunchy. Then blender grind it with shaking, and pour the powder into a sealable plastic container. The yield is about 600 grams of ammonium nitrate for each pint of nitric acid used.

ANFO

ANFO, or Ammonium Nitrate Fuel Oil is a very common binary explosive in mining. It's notably insensitive. ANFO has a detonation velocity of about 1500 m/s, which is not very high compared to other High Explosives.

The ammonium nitrate/fuel oil explosive mixture is made by mixing 94-96% by weight of ammonium nitrate with 4-6% by weight of fuel oil or diesel fuel. The ammonium nitrate must be almost completely free of traces of moisture, otherwise it will not detonate. This same general rule is also true when ammonium nitrate is used as a diluent for high performance explosives. Anything in excess of 1/2 to 1% absorbed moisture will result in detonation failure. It is very easy for ammonium nitrate to pull that much moisture out of the air, so it is good practice to freshly rebake or remicrowave just before mixing it

with fuel oil. Once mixed with the fuel oil, the explosive is largely protected from the effect of atmospheric moisture.

The amount of force required to detonate the mixture depends upon how finely ground the particles are. A fine powder will detonate if about an ounce of high explosive is put into it (one test tube detonator will do). If fertilizer prills are used, one will likely need closer to a pound of high explosive to bring the mixture to detonation. A fine powder produces a higher rate of detonation than what results from larger particles. When using finely ground particles of ammonium nitrate, beware of packing the mixture too tightly. This will make it very hard to detonate properly.

The proper containers for all ammonium nitrate explosives are plastic, rock, or aluminum. Contact with copper or brass is especially dangerous! Assuring that no ammonium nitrate ever comes into contact with the brass requires more prayers to the explosives gods than I would prefer. The low performance of the ANFO mixture can be improved a bit by mixing into the explosive about 10% by weight of aluminum powder.

ANNM

I'll admit it, I'm not the biggest fan of ANFO. It's just sort of LAME! It gives me an icky feeling thinking about it. Personally, I'm all for ANNM through and through. The reasons for the supremacy of the nitromethane formulas are twofold. First of all, the explosives produced using nitromethane are exceedingly powerful. They are much more powerful than the Diesel based recipe just given, and they can even exceed the performance one would get from such staples of military hardware as C-4 or even pure RDX.

The second great advantage of the nitromethane mixtures is their ease of procurement. Hydrazine can be rather difficult to obtain,

and once one has it, working with it can be a life threatening ordeal. In contrast, nitromethane can be easily purchased in gallon jugs at hobby shops, and neither its fumes nor skin contact with the material are particularly dangerous. Saints preserve us, one can even get drums full of the stuff at filling stations catering to racing enthusiasts!

The nitromethane products found at hobby shops are methanol solutions of nitro-methane, with the nitromethane content ranging from 10% up to 50%. The usual container is a one gallon plastic jug. That's enough to keep the typical model air plane flying for a while, so if one desires multiple jugs of product, it is a good idea to split up the shopping spree among multiple stores.

The presence of some methanol solvent in the nitromethane isn't harmful to explosive applications of the product. In fact, there are several patent formulations specifically calling for a mixture of methanol with nitromethane and ammonium

nitrate. It's just that after a certain point of dilution, the mixture isn't going

to give the desired results. As a general rule, any methanol solution of nitromethane stronger than 25% nitromethane will give that all encompassing KA-BOOM.

Weaker solutions of nitromethane can easily be strengthened just by distilling off the methanol solvent. Methanol boils at 65 C (150 F) while nitromethane boils at 101 C, so it is pretty easy to distill the mixture until the remaining liquid in the distilling pot is almost pure nitromethane. A crude distillation set up would work, but real chemical glassware is far preferable. Distilling a methanol/ nitromethane solution isn't dangerous other than the fact that both ingredients are

very flammable. So long as there are no leaks in the still, and so long as the distillate is all condensed back to liquid before it exits the still, and so long as there are no open flames to ignite flammable fumes, all will go well.

Distilling nitromethane/ methanol mixtures is complicated by the formation of the methanol/ nitromethane azeotrope. This mixture boils just a couple degrees cooler than pure methanol, and will always distill out first until the methanol is all gone from the mixture. The azeotrope consists of 92% methanol and 8% nitromethane.

The practical implications of this azeotrope are twofold. The first implication is that any attempt to distill down weaker solutions of nitromethane is going to result in significant losses of nitromethane because the distillate is going to contain at least 8% nitromethane. It also means that attempting to distill down 10% nitromethane solutions is just a total waste of time. My advice is to buy the strongest nitromethane solution available.

A relatively small amount of nitromethane can be parlayed into a veritable explosive bonanza by mixing it with ammonium nitrate. A LOT of patents have been issued for mixtures of nitromethane with ammonium nitrate. For example, US Patent 3,255,057 teaches that by mixing 84 parts by weight ammonium nitrate with 16 parts by weight of a 50% solution of nitromethane in methanol, an explosive is produced which is as powerful as high grade dynamite. Weaker concentrations of nitromethane could be used instead of the 50%, but performance would suffer. I wouldn't bother with any product under 30% nitromethane.

In their patent, they specify using fertilizer prills of ammonium nitrate, but finely ground ammonium nitrate made according to the

directions in this section would also work. To enhance the performance of this mixture, one could mix in up to 10% by weight of aluminum powder. According to the patent, this mixture can be detonated with a number 8 cap, and doesn't need confinement for complete detonation.

13. TATP

Phew, you're probably tired of Ammonium Nitrate now. So am I! Here's a straight-forward recipe for a potent and unstable primary explosive that you can use in detonators! This stuff is so sensitive that even Al-Qaeda nicknamed it "Umu Alshayatan" or "The Mother of Satan". But that's what makes it perfect for things like detonators. That being said, be particularly careful with this one. Be cautious of containers of this stuff that have been sitting out too long. The crystals may have evaporated and re-formed on the lid, and opening it up will cause it to blow up in your hands. I'd seriously advise against making more than a few grams of this stuff. Kåptn K had once left some of this out on a table next to one of my speakers, and when I started playing music through it, it went off. That's how sensitive it is!

Mix equal amounts of acetone and 30% hydrogen peroxide in a glass beaker and cooled to below 10 °C (ice bath, fridge etc.). For 100ml acetone/ hydrogen peroxide mix ca. 30ml 37% Hydrochloric Acid is used. Add the acid in little portions over a period of 20 minutes with occasional stirring. If you don't use an ice bath, put the beaker in the fridge to cool between the acid additions. After all the acid is added, put the glass back in the fridge.

Now it depends on you how patient you are. You could filter the whole shit after 30-60 minutes getting acceptable yields. Waiting for 6-8 hours will reward you with a much greater yield.

(You can wait even longer, but with 6-8 hours you've got most of the AP and the crystals are still like flour. Waiting for longer will result in larger AP crystals that are more sensitive!)

To filter add 1 50ml distilled water to the AP (should be a thick, white slurry) to dilute the acid and make the shit pourable for filtering. I use a normal paper coffee filter without any problems. Put the slurry on the filter and wash with distilled water until pH is nearly neutral. Now spread the AP on a flat surface to dry. I prefer putting it on a layer newspaper, covered with some tissue. This speeds up the drying process considerably.

14. THE HOUSE GUEST

For our final recipe, I present to you, probably the most destructive thing you could produce at home... The "House Guest"! Now, don't thank me for this, thank Uncle Sam's hired goons from the Third Battalion, Fifth Regiment of the United States Marine Corps during their invasion of Iraq. They found that sometimes clearing houses by hand was too much work, so a few of them put their brains together and with a collective 2.4 GPA, came up with this wonderful DIY thermobaric bomb.

It is constructed from a propane tank, like the sort used by propane grills, and some explosives. In their case it was C4, but for us we'll have to improvise. Propane tanks are often made of cheap carbon steel, with walls about $\frac{1}{8}$ inch thick for the grill size ones, and going up to a $\frac{1}{4}$ inch thick for the bigger ones. We'll need something powerful enough to blow a significant hole in this. A pound or so of ANFO or ANNM would work well. A plastic jar, like the sort Ovaltine is packaged in, would do well. Secure this to the top of the propane tank, with a suitable detonator and a **very** long fuse. These reportedly could level a two story Iraqi building, so just imagine what it could do to a

flimsy American home built of plywood and tyvek. Thank our veterans for this design!

Thanks for reading!
–Käptn K